osteum. It was removed without difficulty, the wound being covered by skin flaps dissected from the tumor. See Fig. 1.

POST-OPERATIVE TREATMENT.

Dr. John H. Gibbon read a paper with this title, for which see page 298.

Dr. John B. Deaver endorsed much that was said by Dr. Gibbon. He believes, however, that instead of patients being neglected they receive too much attention. His motto for the house physician is, "Let the patient get well." No medicine should be given after an operation as a rule. He is opposed to the indiscriminate and routine use of strychnin. He employs nothing but ether as an anæsthetic, being afraid of chloride of ethyl, as he has heard of deaths from it. Giving the anæsthetic is an important thing and ether usually does no harm. It is best to anæsthetize the patient on the operating table, as it is a mistake to move him there after ether is begun, this always meaning an extra amount of the drug. The patient may be anæsthetized in the high pelvic position even, the intestines thus being floated up and requiring less packing when the operation, being an abdominal one, is begun. When operating upon the upper abdomen he always has the patient wrapped in cotton and put upon a hot water bed; the cotton is at once removed when the patient is taken to his room.

As to scopolamin, Dr. Deaver does not know what it looks like and is thankful he does not. Tight sutures, as stated by Dr. Gibbon, make trouble; he usually places a drain in stout walls for a day. He was sorry to hear Dr. Gibbon say he uses morphin after operations; Dr. Deaver would at once discharge a resident if he did that. Its immediate effect is to make the patient more comfortable; after that it makes him more uncomfortable. It creates more thirst and often more nausea. Occasionally he employs morphia, but never as a routine measure. He administers oxygen immediately after operation and this lessens nausea, that fact being noted in the German Hospital by the Sisters who have been on duty for fifteen to twenty years. A careful nurse is of more moment than a hypodermic of morphia. There is not so much in the use of morphia after gastro-enterostomy as formerly supposed. When this operation is performed by making the communication with the jejunum as near as possible to its commencement vomiting does not occur.

Dr. Deaver never sees shock, except in cases of hæmorrhage or prolonged operation or bad anæsthetization. The pulse of his patients after short operations is always about 84 to 90. Getting the patient out of bed early is an important point. Cases of hysterectomy are gotten out in a week and are encouraged to turn on their side early. Many of the cases of phlebitis, formerly so frequently seen, were due to lack of these measures. As regards passing the catheter, he allows hernia patients to get up to pass urine; worse results than are made possible by this come from catheter cystitis. He never operates upon an empyema without first aspirating it.

Dr. William L. Rodman now has largely the opinion of Dr. Gibbon regarding morphia, though formerly he was afraid of it. Since its use he sees much less post-operative vomiting. Perhaps it is unwise, however, to use it as a routine measure. He has never known a gastro-enterostomy to give trouble when morphia is given. There is less shock and less anæsthetic is necessary. A quarter grain of morphia and one one-hundred and fiftieth grain of atropia are invariably given in cases of gastro-enterostomy. Of seven recent cases only one patient vomited, and that one only once. We give anæsthetics much better now than formerly and do not see so much distress from their use. When ether is given by the drop method there is but little post-operative vomiting, with or without morphia. Dr. Rodman prefers chloroform in empyema cases, of which he has operated upon 100 to 150 without losing a patient, and has never seen any ill results; with ether these cases are more unpleasant. Patients should be gotten out of bed early, especially the subjects of cancer, who should be out in 48 hours. If such persons, particularly when the cancer was in the abdomen, are kept in bed a few days they never get out. The possible development of a ventral hernia is not to be regarded in these cases. In gastro-enterostomy for cancer of the stomach, the patient should be out of bed the day following the operation.

Dr. William J. Taylor finds that patients occasionally are benefited by washing out the stomach before they are out of the anæsthesia. This is especially true in cases of intestinal obstruction or in emergency operations where previous emptying of the bowels has not been possible. Food should not be given too soon. He had rather keep a patient three days without food than to give

milk and soup and have it ferment in the intestine instead of digesting.

Dr. Richard H. Harte does not believe in the indiscriminate use of morphia in operative cases. He believes that the routine dose of a quarter grain of morphia before a patient is ethcrized is in time liable to lead to serious results, numerous cases being reported where this dose has been fatal. As a rule, the less medicine given after operation the better for the patient. Invariably the bowels, if left to themselves, will move in the course of two or three days. Their action can, however, be supplemented by the use of a simple enema. Dr. Harte lays great stress on the importance of keeping patients warm and dry during operation, avoiding exposure as much as possible, as shock is often induced by air coming in contact with wet clothing, as well as by prolonged unnecessary manipulation of the intestine. Fortunately this latter is less noticeable now, as the non-operative field is pretty well shut out by the judicious use of pads of gauze.

The early feeding of patients is unquestionably a great error, as food introduced into the bowel too soon only ferments and causes an immense amount of discomfort. Patients are as a rule much better by waiting 24 to 48 hours before any food is ingested, and even then, if there is any question of irritability of the stomach, they can be readily nourished by the bowel. Thirst, which is so common in post-operative cases, can be relieved by keeping the bowel filled with normal salt solution.

Dr. John B. Roberts said that post-operative backache is not due to operation itself or to the fact that the patient is kept in bed, but is usually caused by the flat operating table upon which the patient lies during anæsthesia and operation. A hard pad should be placed on the table under the lumbar region of the patient. A hard mattress is also too flat. The table ought to be made to fit the curves of the back, so that the muscles and ligaments may not be strained during a long operation. For 18 or 20 years he has given before almost all operations a quarter of a grain of morphia and one one-hundred and fiftieth of atropin hypodermically. Less anæsthetic is required, there is less interference with breathing by mucus, and the heart is strengthened by this preliminary to anæsthesia. He has never known it to hurt a patient. The curse of thirst, due to the operator insisting that abdominal cases should have no water to drink till hours have

elapsed, should be avoided by all sensible surgeons. The unnecessary torture thus induced should meet with the strong condemnation of the profession. Dr. Roberts has always contended, since the rise of abdominal surgery, that its principles are identical with those of general surgery; and has acted on that belief. A little morphia before anæsthesia and water afterwards do no harm in either case. Another point in post-operative treatment is that nurses nearly always put patients on the stretcher without a pillow under their heads; a low pillow surely can do no harm and is much more comfortable to the patient than to lie with the head thrown backward on the bed.

Dr. John B. Deaver said regarding backache being due to flat tables, he has noted that few gall-stone patients complain of their backs after operation. This would indicate that Dr. Roberts is correct in his statement about the lack of support to the back.

Dr. George G. Ross wondered how many of the surgeons present had suffered as have the patients they were discussing? He had had his appendix removed, and the following night suffered the tortures of the damned. One of his friends surreptitiously gave him a morphin suppository which afforded great relief. The nurse brought in a large bowl of ice, which he did not interfere with until the ice all melted, when he drank every drop of the water. And this was not followed by vomiting.

Dr. Gibbon, in closing, said that he agreed with the other speakers that as few drugs should be used after operation as possible. He emphasized the fact that in using morphia in the manner described it formed rather a part of the anæsthetic than of the after-treatment. Dr. Deaver's dissatisfaction with the use of morphia was the result of using it after, and not during or before, anæsthesia. It has not been Dr. Gibbon's experience that distension follows its use in the way described. His own personal experience after an operation for acute appendicitis had confirmed him in the value of the ethyl chloride-ether-morphia sequence. He slept comfortably for four hours after his operation, was not at all nauseated, and had no taste or smell of ether. He said that he should have mentioned in his paper the great value of washing out the stomach, especially in those patients who had not been properly prepared for operation.